BookletChartTM

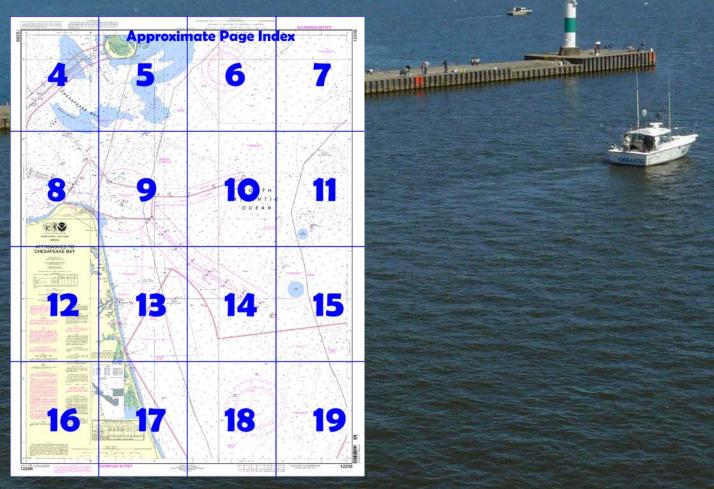




A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=122 <a href="http://www.nauticalcharts.noaa.gov/nsd/searchbycharts.noaa



(Selected Excerpts from Coast Pilot)

Endangered northern right whales may occur in approach channels to the Chesapeake Bay. They are most likely to occur in the area from November through April.

Chesapeake Light (36°54'17"N., 75°42'46"W.), 117 feet above the water, is shown from a blue tower on a white superstructure on four piles, 14 miles eastward of Cape Henry. The name CHESAPEAKE is displayed on all sides. A fog signal and racon are at the light. A fish

haven, consisting of sunken fishing-boat hulls and marked by private unlighted buoys, is about 0.4 mile southwestward of the light.

Nautilus Shoal, which extends 4 miles southeastward from Fishermans Island, has patches with depths of 6 to 11 feet. The buoyed channel along the southwest side of Nautilus Shoal, thence northward between Fishermans Island and Inner Middle Ground, had a controlling depth of about 16 feet in 1977-1980. The channel is used by local vessels drawing up to 12 feet. This channel is not recommended for strangers because of shifting shoals. In 1996, a 10-foot shoal was reported 1.5 miles S of Fishermans Island in about 37°03'31.2"N., 075°57'27.0"W. Breakers frequently occur along the axis of Inner Middle Ground, starting on the seaward side of the Chesapeake Bay Bridge-Tunnel and continuing the entire length of the shoal. This phenomenon appears to be associated with large swells rolling in from sea from the south-southeast to southeast.

Cape Henry Light (36°55'35"N., 76°00'26"W.) is shown from an octagonal, pyramidal tower, upper and lower half of each face alternately black and white, on the beach near the turn of the cape. The gray octagonal, pyramidal tower 110 yards southwest of Cape Henry Light is the abandoned 1791 lighthouse.

Local magnetic disturbance.—Differences of as much as 6° from the normal variation have been observed 3 to 17 miles offshore from Cape Henry to Currituck Beach Light.

A **naval restricted area** extends northward and eastward from Cape Henry.

The Chesapeake Bay Bridge-Tunnel extends from Cape Charles across the bay entrance to a point 6 miles westward of Cape Henry. The 15-mile crossing has vehicular tunnels under Chesapeake Channel and Thimble Shoal Channel with fixed bridges over Fishermans Inlet and secondary channels. In addition to the channel buoys and lights, daybeacons and fog signals mark the openings at Chesapeake and Thimble Shoal Channels. At night the floodlighted tunnel houses are more prominent than the privately maintained lights marking the channels. In July 1996, a two-lane low level and high level fixed span bridge was under construction about 267 yards westward of the existing fixed highway bridge across Chesapeake Bay; upon completion, the clearances will be the same as the existing bridge.

A **naval restricted area** extends northward, eastward, and southeastward from Cape Henry. (See **334.320**, chapter 2, for limits and regulations.)

A **naval prohibited area** is off Camp Pendleton, 7.4 miles southward of Cape Henry. (See **334.400**, chapter 2, for limits and regulations.) **Danger zones of naval firing ranges** are about 8 and 9 miles southward of Cape Henry. (See **334.380 and 334.390**, chapter 2, for limits and regulations.)

Two radar towers and a blue water tank, 158 feet above the water, are prominent at the Dam Neck Naval Station about 9 miles southward of Cape Henry Light.

Part of Back Bay National Wildlife Refuge extends from 15 to 18.5 miles south of Cape Henry Light along The Outer Banks.

False Cape, so called because of its resemblance to Cape Henry when approaching from southward, is about 22 miles southward of Cape Henry Light. Several spots with depths of 10 to 17 feet are 0.8 to 1.5 miles offshore from False Cape.

Sand dunes in this area have a tendency to alternately erode and then build up again as the seasons change, generally working to the southward; they should not be depended upon as navigational marks.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Norfolk Commander

5th CG District (575) 398-6231 Norfolk, VA



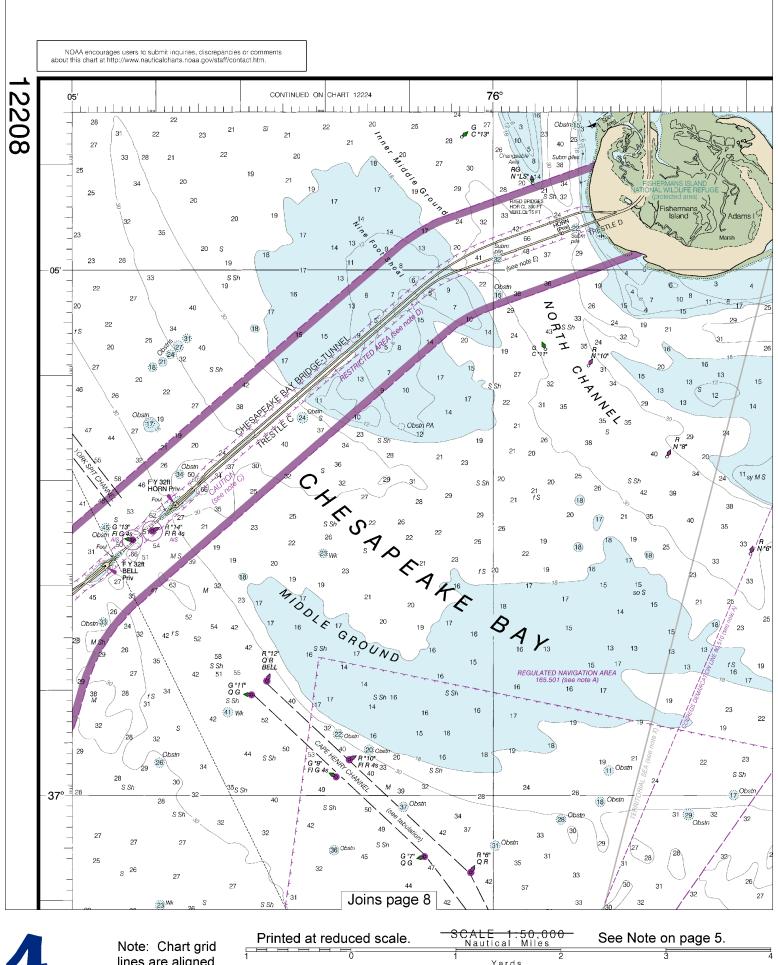
NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*. To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

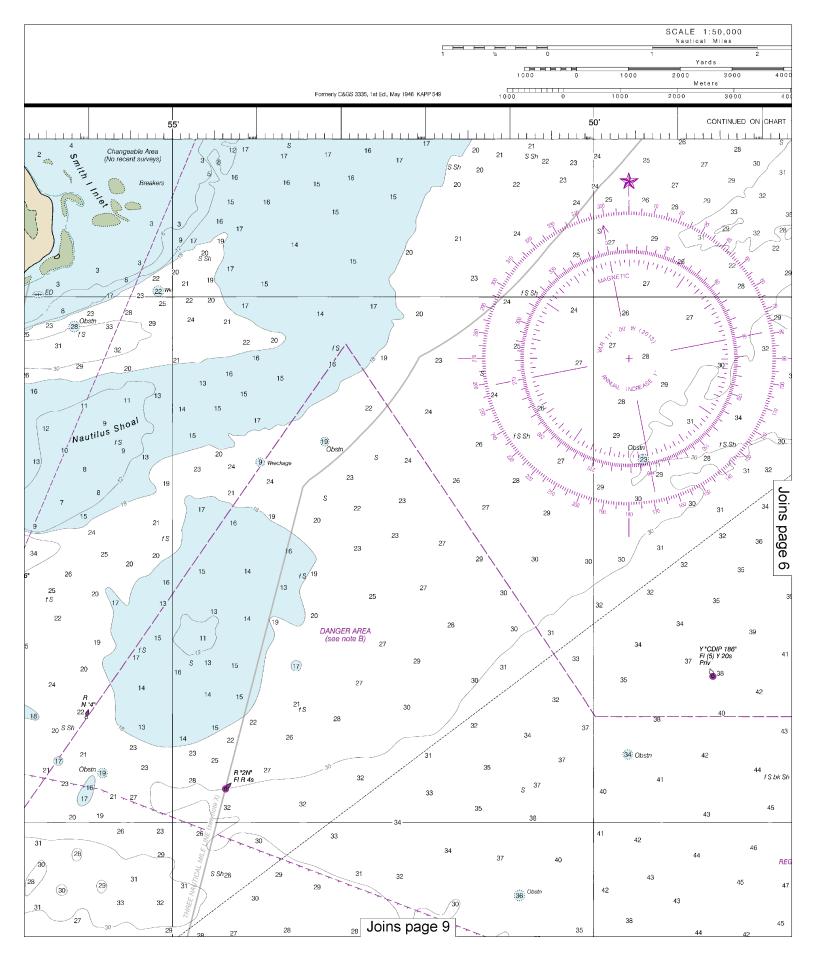
Lateral System As Seen Entering From Seaward on navigable waters except Western Rivers

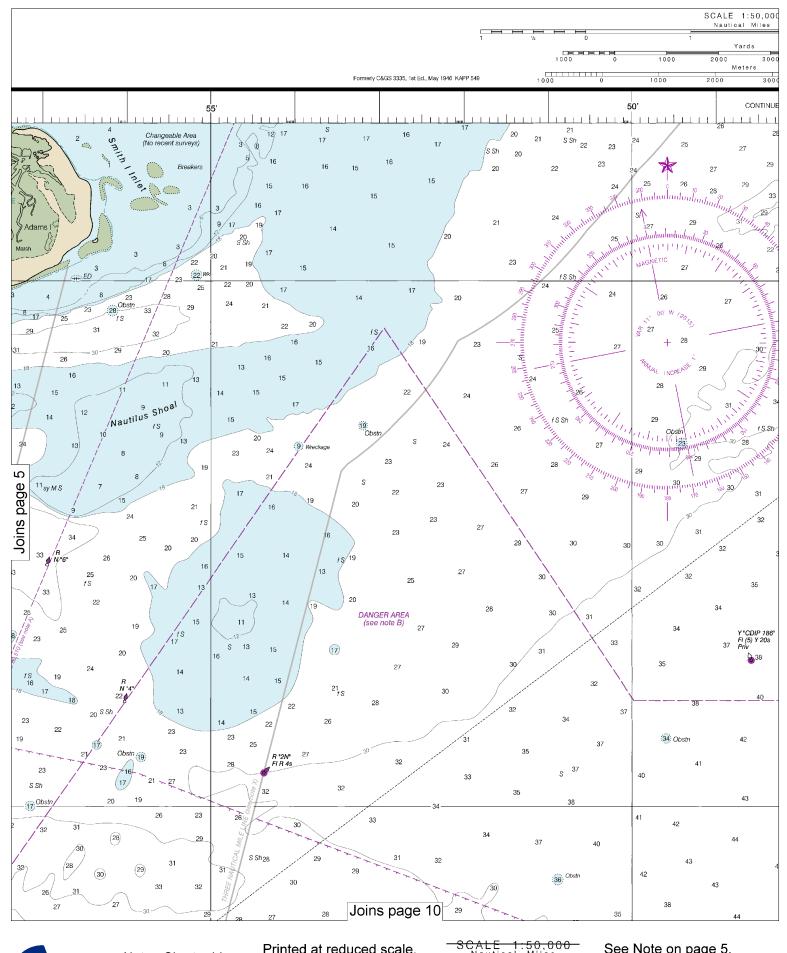


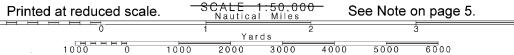


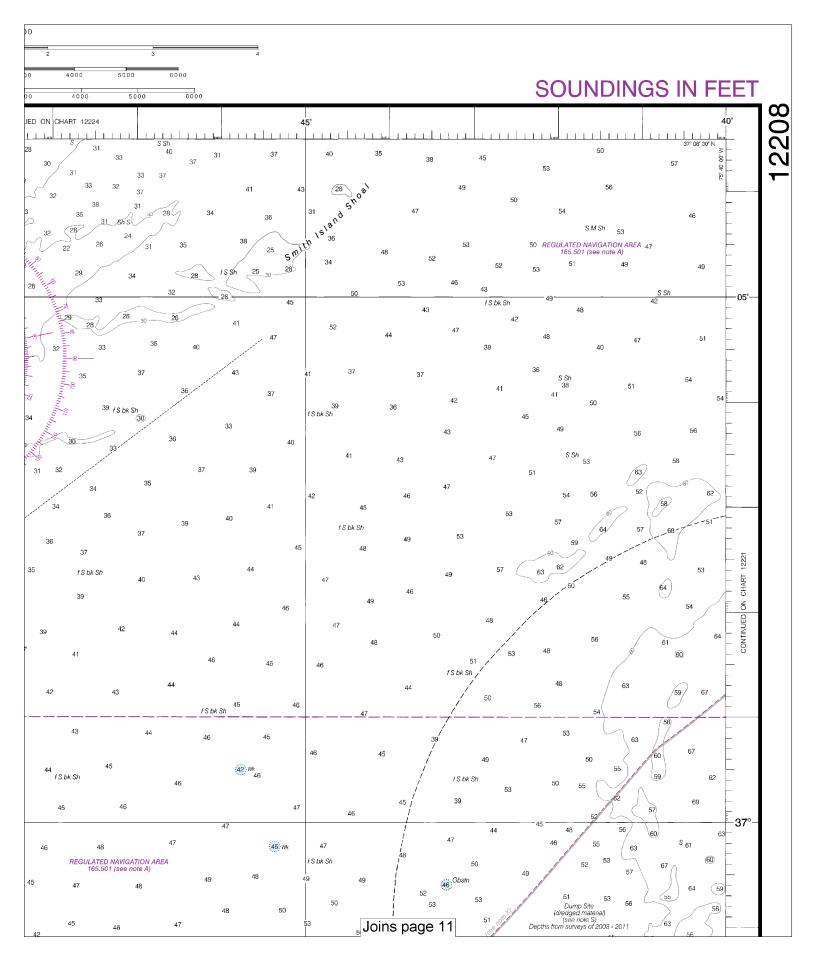
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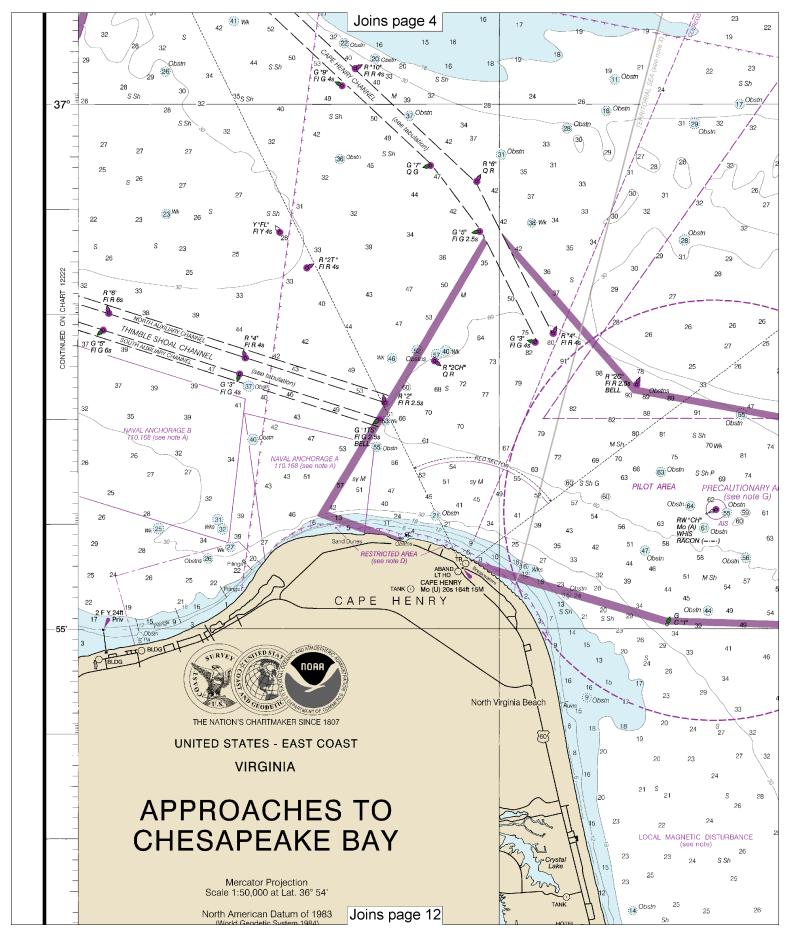






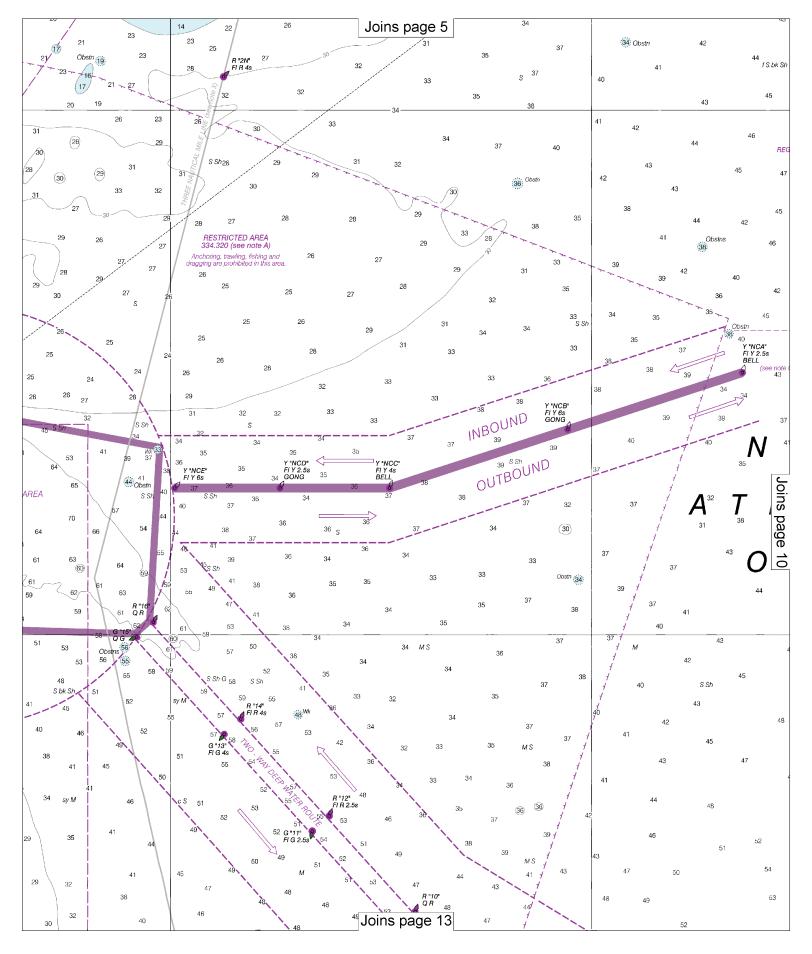




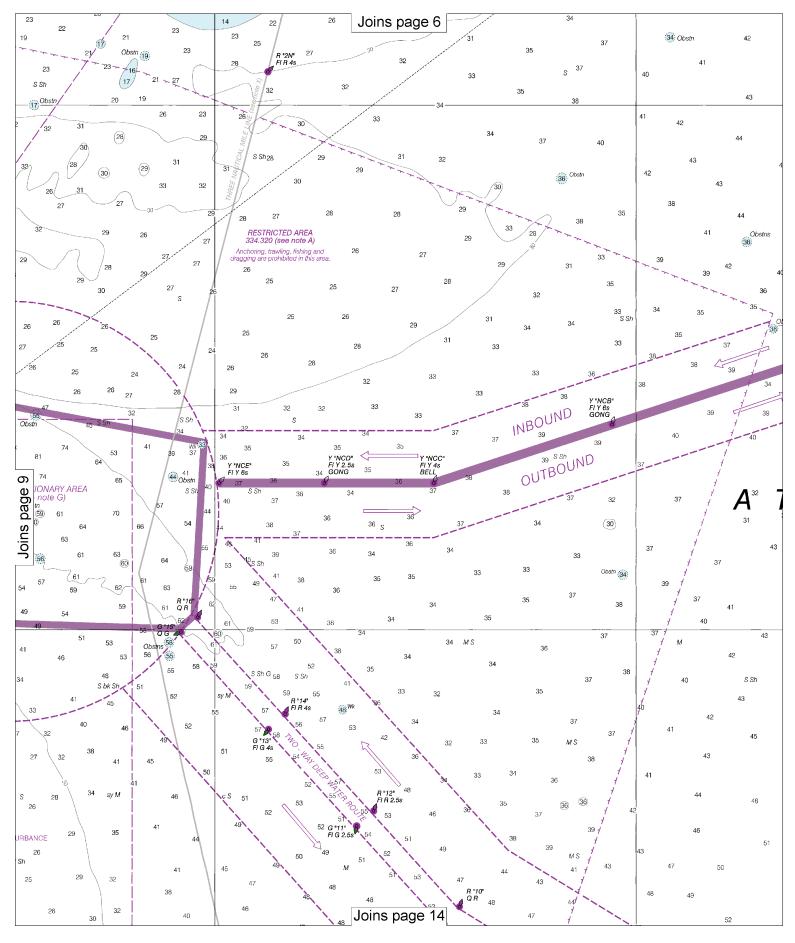




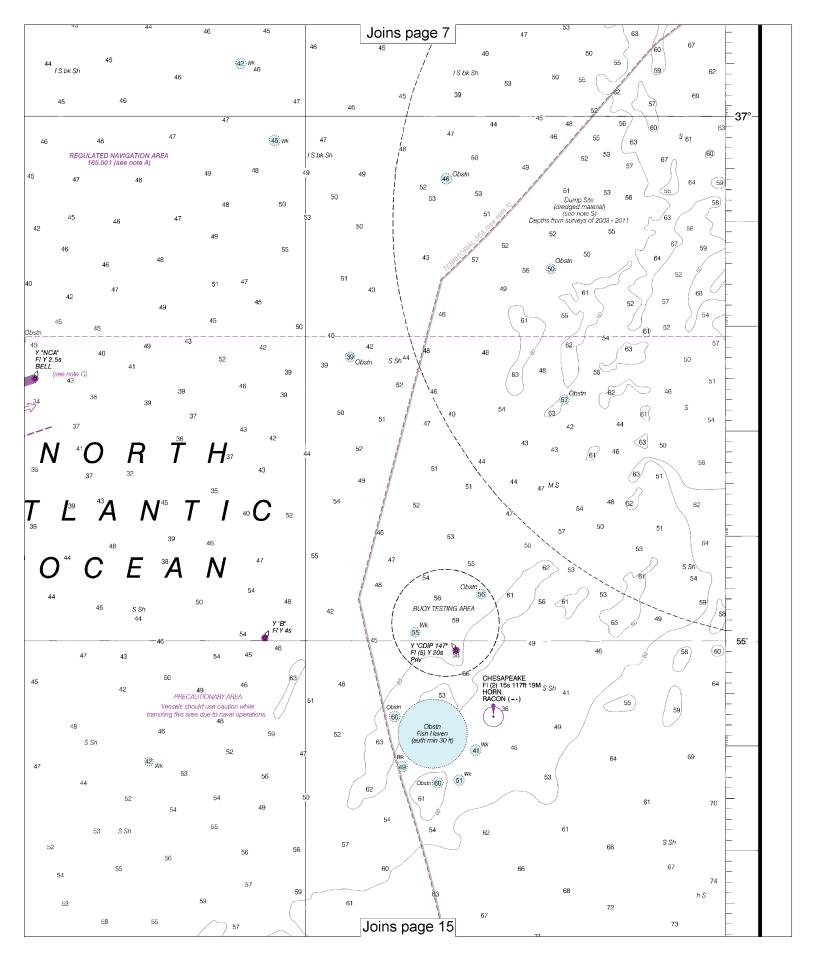












THE NATION'S CHARTMAKER SINCE 1807 Joins page 8 UNITED STATES - EAST COAST **VIRGINIA** APPROACHES TO CHESAPEAKE BAY Mercator Projection Scale 1:50,000 at Lat. 36° 54 North American Datum of 1983 (World Geodetic System 1984) SOUNDINGS IN FEET AT MEAN LOWER LOW WATER Additional information can be obtained at nauticalcharts.noaa.gov TIDAL INFORMATION PLACE Height referred to datum of soundings (MLLW) Fishermans Island Cape Henry Lynnhaven Inlet, Virginia Pilots Dock Virginia Beach (37°06'N/75°59'W (36°56'N/76°00'W (36°54'N/76°05'W (36°51'N/75°58'W) es (- - -) located in datum columns indicate unavailable datu tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov HEIGHTS Heights in feet above Mean High Water. SUPPLEMENTAL INFORMATION Consult U.S. Coast Pilots 3 and 4 for important supplemental information. For Symbols and Abbreviations see Chart No. 1 50 COLREGS: International Regulations for Preventing Collisions at Sea, 1972 Demarcation lines are shown thus: NOTE A Navigation regulations are published in Chapter 2, U.S. Coast Pilots 3 and 4. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 5th Coast Guard District in Portsmouth, Virginia or at the Office of the District Engineer, Corps of Engineers in folk, Virginia. Refer to charted regulation section numbers.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and National Geospatial-Intelligence Agency.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1993 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.535" northward and 1.249" eastward to agree with this chart. to agree with this chart.

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Quard Light List and U.S. Coast Pilot for details.

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

RADAR REFLECTORS

Radar reflectors have been placed on many ref Joins page 16 ds has been

R "2" A FIR 2.5s 27 Rudee Inlet G 1 G 2.5s SM 25 RESTRICTED AREA 334.400 (see note 27 29 SOURCE DIAGRAM TOWER The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained

by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot.</u>

SOURCE

full bottom coverage

partial bottom coverage

NOS Surveys

NOS Surveys

18 19

21

22

25

14 Obstn

24

23

CUPOLA O

VIRGINIA BEACH

Lake Holly

LOCAL MAGNETIC DISTURBANCE

27

26

26

26

REGULATED NAVIGATION

26

COLREGS DEMARCATION LINE 80.515a (see note A)

27

26

25

25

26

26

proximity of the bridge-tunnel complex is discouraged. NOTE D

EMERGENCY RESTRICTED AREA

NOTE B DANGER AREA Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any other similar type of operation because of residual danger from mines on the bottom.

CAUTION

CAUTION

The Chesapeake Bay Bridge-Tunnel Complex has on several occasions suffered damage from vessels due to adverse weather conditions. Currents in excess of three knots can be expected in the area. Mariners transiting this area are urged to be particularly alert in regards to the weather situation. The National Weather Service provides 24 hour weather broadcasting on 162.55 MHz. The Local Marine Operator also transmits weather information at 0100, 0700, 1300 and 1900 local time on 2638 and 2450 kHz. Transmitting schedules are subject to change, see Notice to Mariners. Maneuvering in close proximity of the bridge-tunnel complex is discouraced.

For the latest information regarding the regulations of any emergency restricted area, contact the Army Corps of Engineers Norfolk District, Regulatory Branch at (757) 201-7653/7652.

CHESAPEAKE BAY BRIDGE - TUNNEL (Private lights)

North Channel Bridge - A fixed green light marks the mid-channel with fixed red lights marking the channel limits. Fixed red obstruction lights mark each pier in Trestles C and D.

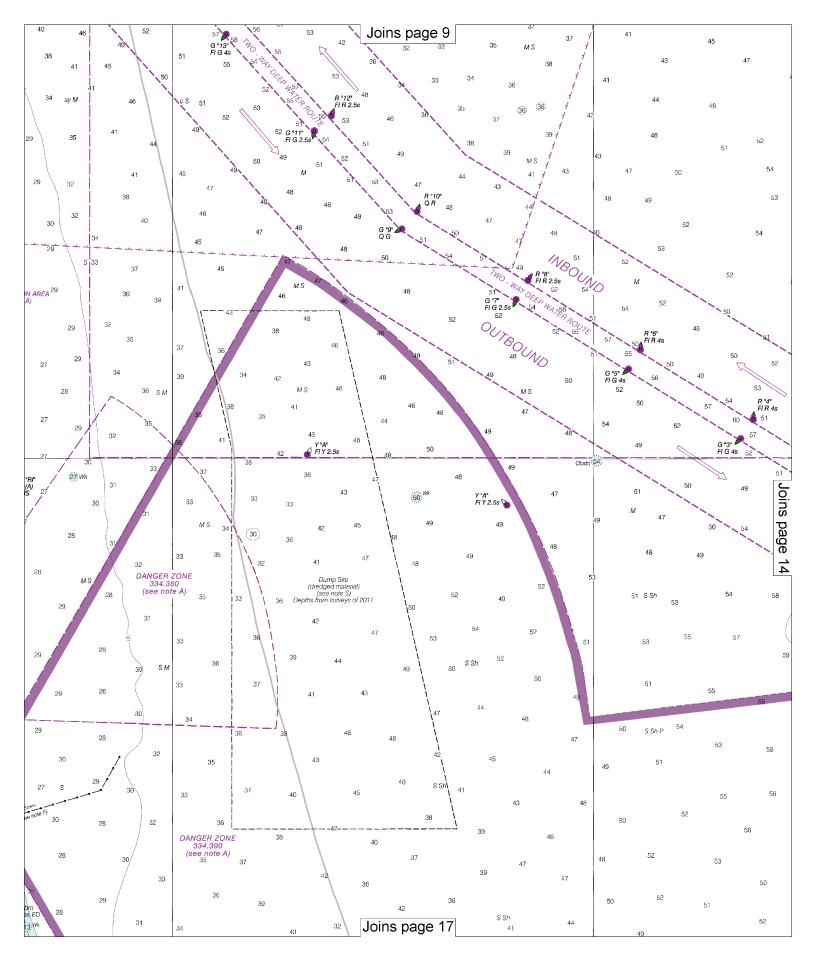
CAUTION

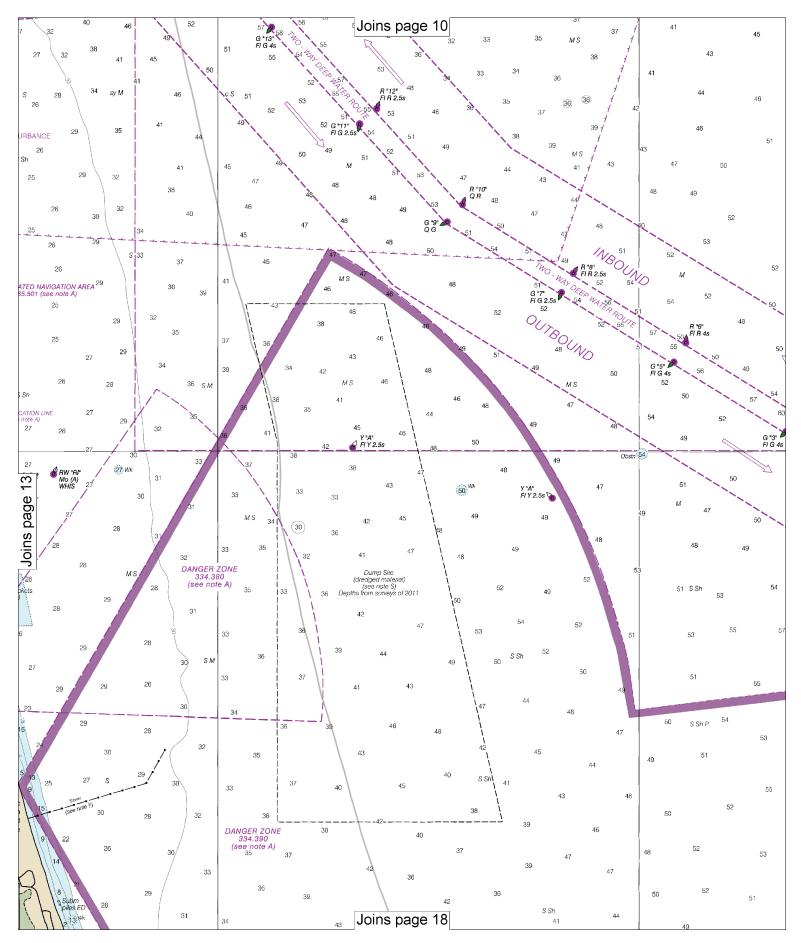
Numerous diffusers, rising $4\frac{\pi}{2}$ feet above existing bottom, are found along the last 2,400 feet of the sewer.

Note: Chart grid lines are aligned with true north.

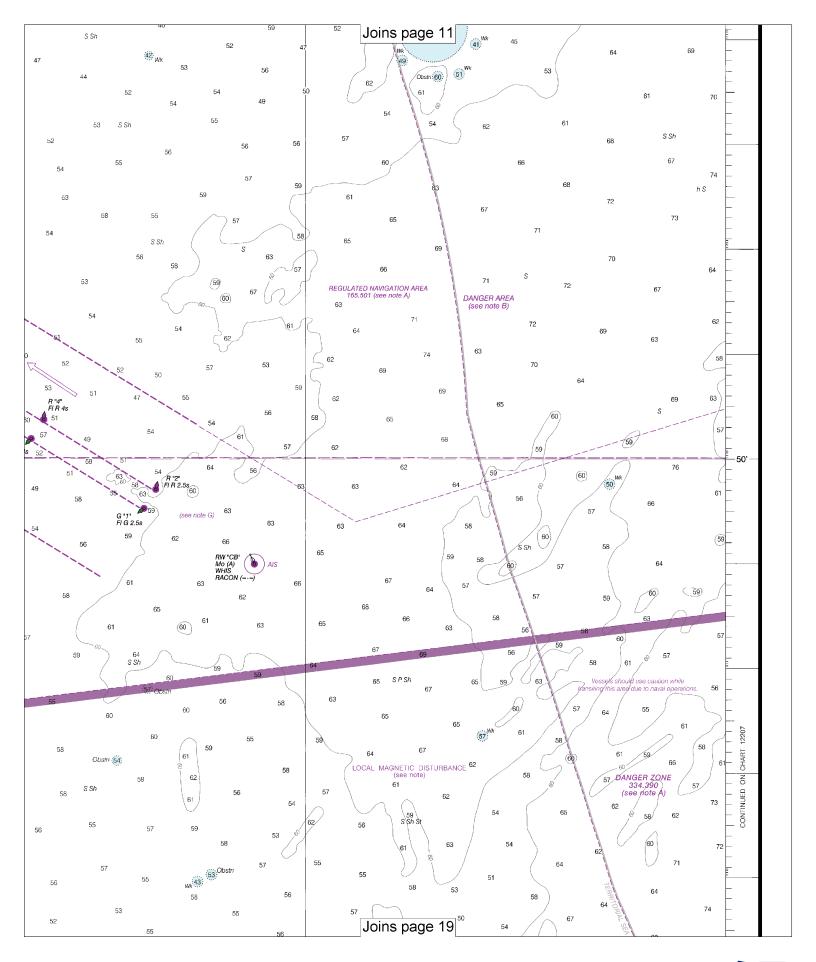
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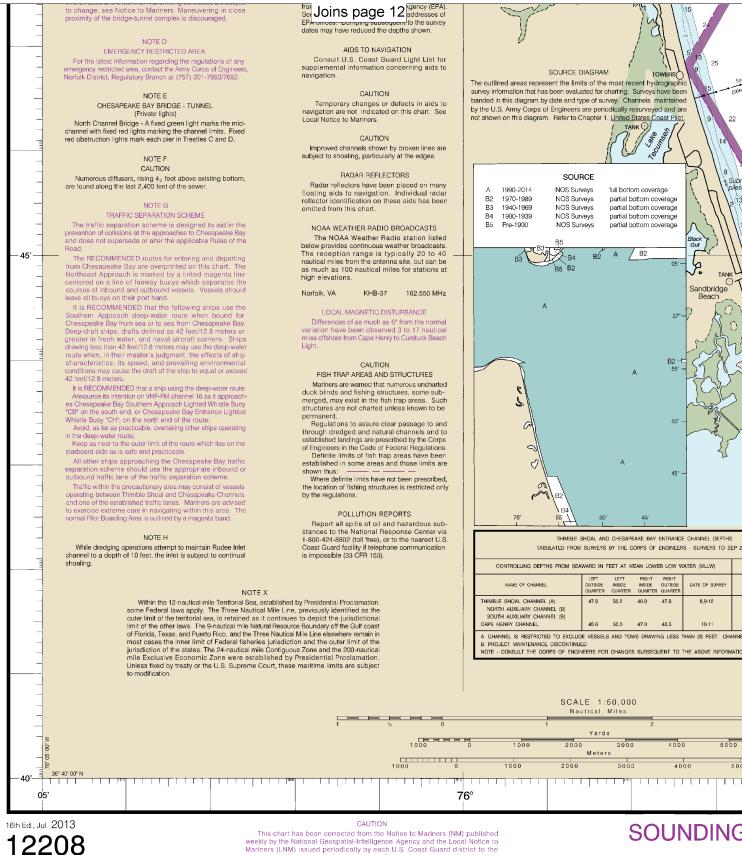
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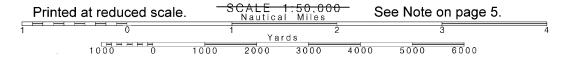


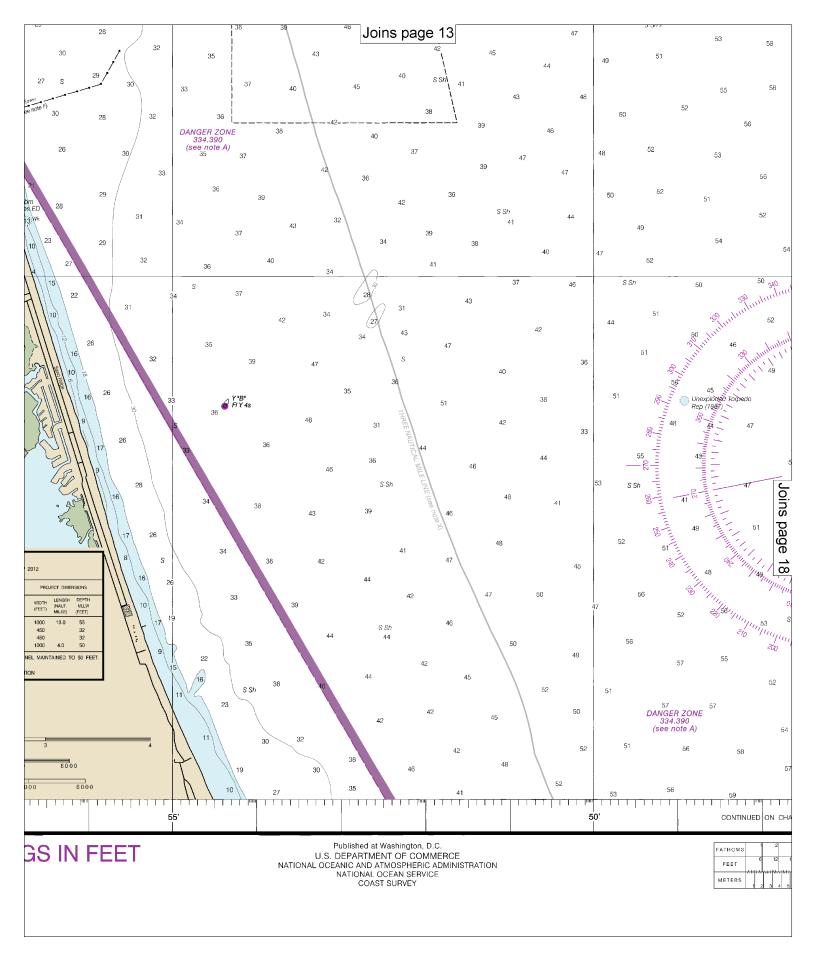


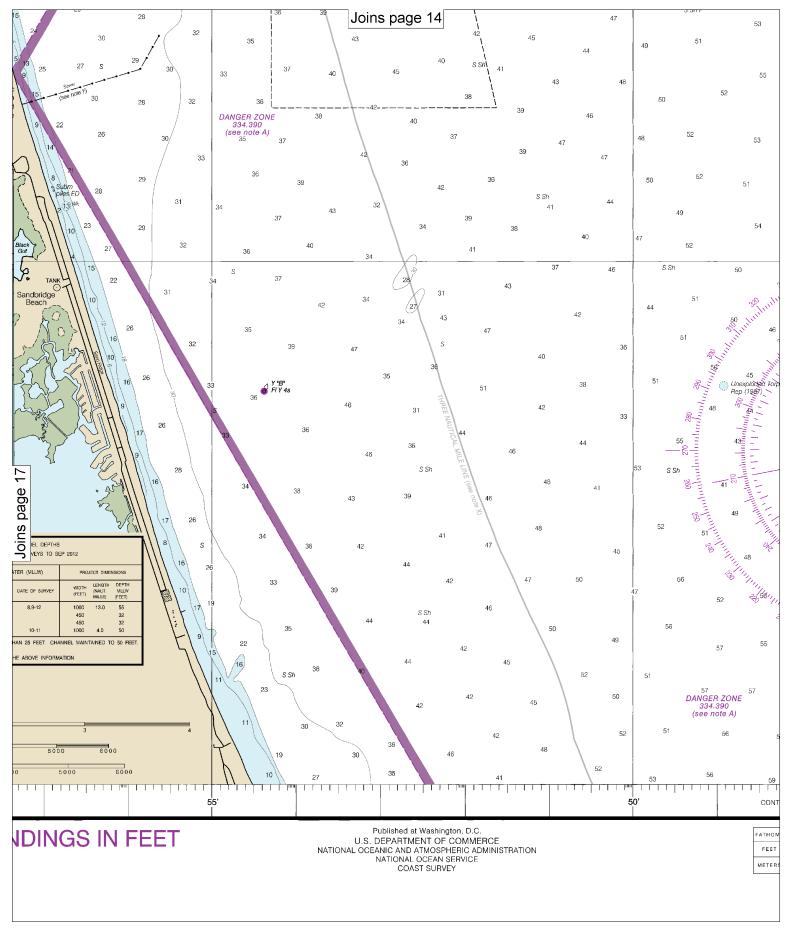


This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at

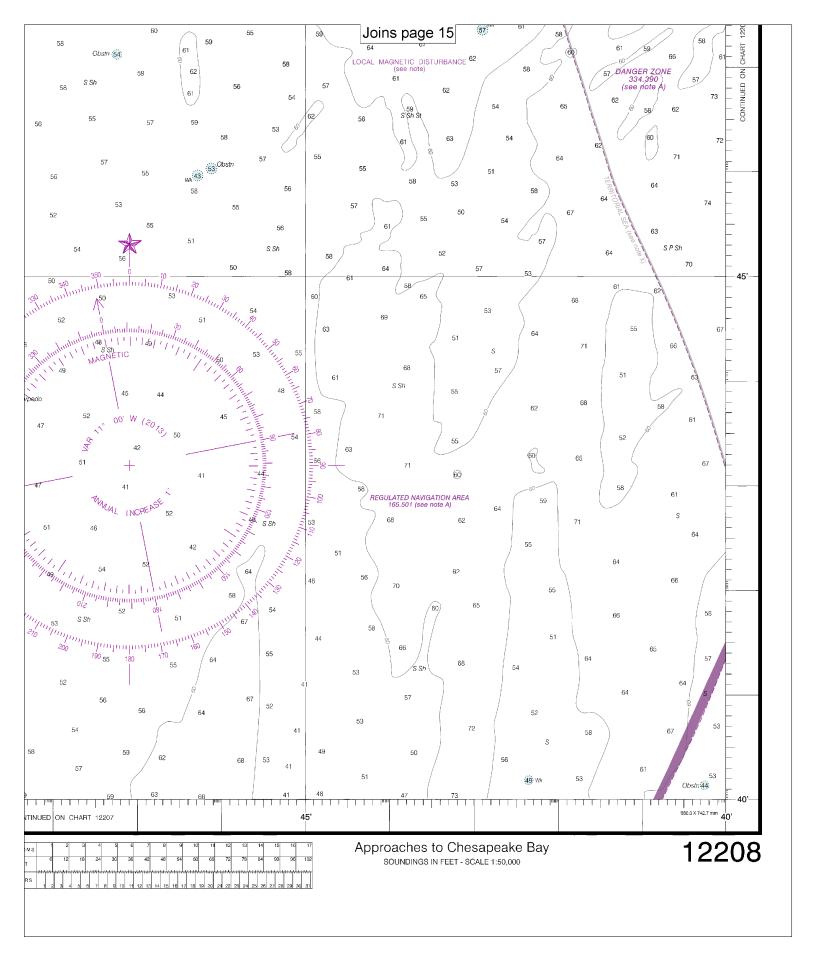
Last Correction: 4/19/2016. Cleared through: LNM: 2516 (6/21/2016), NM: 2716 (7/2/2016)







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VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information — http://www.nauticalcharts.noaa.gov

Interactive chart catalog — http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml

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Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.